

This genus belongs to the Erebiid series, is nearest to *Trama* in general appearance, and is the first example known to me of the occurrence of hairy eyes in combination with other characters. Unfortunately I had no male.

Egryrlon filaria, sp. nov.

Ground color dark chocolate brown. Head, thorax and abdomen without markings. Primaries with the median lines narrow, contrasting pale blue, the t. p. line followed by a bluish shading, which is broader toward the inner margin. The veins as they cross the t. a. line are a little blue powdered a short distance on each side. T. a. line a little outcurved, with a small angle on the subcostal vein, marked on each side by black scales. T. p. line outcurved over the cell, then rivulous to the inner margin. Edged on each side by black scales. S. t. line marked by a series of obscure black spots in the interspaces. There is a series of black, terminal lunules. Reniform small, narrow, upright, a little constricted, outlined by black scales. Secondaries with the t. p. line of primaries continued as a sinuate line about three-fifths from base, shaded outwardly by blue scales and inwardly edged by black scales. There is a linear, black, discal mark. Beneath a little paler brown, each wing with a black discal lunule.

Expands 23 mm. = .92 inch.

Habitat: Biscayne Bay, Florida (Mr. Slosson).

One female only, in good condition. The species should be easily recognizable by the clean cut blue lines on the chocolate ground; the outer is continued across the secondaries.

NOTES ON THE LARVAL-CASES OF LACOSOMI-
DÆ (PEROPHORIDÆ) AND LIFE-HISTORY
OF LACOSOMA CHIRIDOTA GRT.

PLATE VI.

BY HARRISON G. DYAR.

No species of the family Lacosomidæ has had its life-history fully written. The best known larva is the North American *Cicinnus melzheimerii* Harris, of which the egg, half grown larva and mature larva have been described (see Packard, Ann. N. Y. Acad. Sci., VIII, 50). The youngest larvæ known seem to live already in a rude case. The same appears to be the condition in *Mimallo æmilia* Stoll (see Sepp, Surin. Vlind., pl. 20). Both these species form at maturity a

well constructed case; but the height of perfection in this line is reached in *Cicinnus despecta* Walk. and allies, which construct a curious case as hard as wood. Of one of these, *C. externa*, Moore says: "This caterpillar lives in a hard hammock-like case formed of the excrement, joined together with silk and mucilage. The case is suspended from the twig on which it feeds by silk threads and is generally slung in a more or less vertical position, so that the curved end protects the upper opening from rain. Both ends of the case are alike and the caterpillar puts his head out at either end with equal facility." (Proc. Lit. Phil. Soc. Liverpool, XXXVI, 54.) Figure 9 of the plate shows a case like this.* Another group of larvæ form a case only at maturity, living at first under a net. Concerning one of these, *Cicinnus violacea*,† Sepp states that the larva when half grown lives in a reticular net, but later makes a case, using silk and pieces of leaves and bark mingled with excrements. (Surin. Vlind., pl. 30.) Such nets on the oak had been known to me for some time, but I did not at first suspect that they had any relation to the Lacosomidæ. They are quite common in the scrub oak country along the south shore of Long Island from Babylon to the eastern end, and they prove to belong to *Lacosoma chiridota*, a species usually very rare. Its life-history is as follows:

Lacosoma chiridota Grote.

LARVA.

1890—Packard, 5th Rept. U. S. Ent. Comm., 141.

1893—Packard, Ann. N. Y. Acad. Sci. VIII, 47.

Egg.—Laid on the edge of the leaf or on one of the points. Cylindrical, the ends rounded and with a marked central constriction; base flat, a little spreading; a longitudinal groove along the lower part of each side; six longitudinal striæ, not marked enough to be ridges, the rest of the surface finely shagreened. Shell white; size 1.4 × .4 × .5 mm. (Plate VI, fig. 1).

Stage I.—Under a net (Plate VI, fig. 3) on the upper side of a leaf of *Quercus tinctoria*. Head .3 mm. wide. Head and dorsum dark brown, darkest toward the sides; subventral region pale whitish

* See also the account in the Cambridge Nat. History Insects part ii, pp. 377-379 (as Perophoridae).

† Probably not belonging to this genus, but I have no specimens by which to correct the reference.

brown. Skin smooth, segments 3-annulate, setæ short and pale but distinct and with enlarged tips; i, ii and those of the cervical shield and head are especially short and paddle-shaped. Toward the end of the stage the larva enlarges the net, spinning cross threads nearly up to the anchors, strung with frass.

Stage II.—Head .5 mm. As before, the dorsal setæ with enlarged tips. Dorsal half of body brown with several fine, pale lines; subventral region whitish. Shape normal, the cervical shield large, not cornified; anal end tapering, not truncate; segments 3-annulate, annulet 1 large; feet short, dark brown.

Stage III.—Head .8 mm., pale brown, dotted and with two narrow pale yellowish lines that continue the addorsal lines of the body; a spot circled by pale on each side of the apex of the clypeus; setæ pale, the upper ones with bulbous tips. Body striped longitudinally with brown and pale yellowish; a geminate brown dorsal line; a broad subdorsal one, continuous with the brown sides of the head; subventral ridge prominent, pale; all with sparse pale granules. Joint 2 is as wide as the head, the posterior half of the body widened laterally; joint 13 small; subventral region brown, contracted. Setæ short, pale. Net 10 × 13 mm. in size (Plate VI, fig. 4). At the end of this stage larva cut a slit from the edge of the leaf to the eaten part under the net, being the first indication of a tendency to form a case. The larva also fastened the leaf firmly to the twig.

Stage IV.—Head 1.2 mm., pale yellow, thickly dotted with brown, leaving yellow lines on the sutures and in a vertical band on the face of each lobe. Body yellow, dotted with brown, forming four irregular and broken lines between the yellow dorsal line and substigmatal fold, a little heavier on the thorax and obscurely appearing to meet around the posterior end of the body. Anal plate large, yellow; cervical shield striped like the body. Tubercles small, dark, in pale areas; iv and v in line, somewhat approximate, with swollen apices. Segments annulate, granular from the primary tubercles. Subventral region dark brown, retracted and invisible from above.

Stage V.—Head 2.1 mm., greenish yellow with dark brown mottlings in vertical streaks, leaving irregular pale areas. Body yellow, lined longitudinally with brown; addorsal, subdorsal and lateral lines, the intervening yellow lines narrow and somewhat oblique, the brown dark only on the anterior third and posterior tip of the body, fainter luteous centrally; subventral ridge rather prominent, subventer dark

brown on the thorax, elsewhere faintly luteous. Venter pale, translucent. Feet pale, the abdominal ones very short with crotchets in an ellipse. Spiracles black. During this stage the larva left its net and constructed a rude case by uniting two leaves and partly biting them around. It spun a few threads across the opening.

Stage VI.—Head 2.7 mm. (in small male larva), round, higher than wide, the apex a little under joint 2; clypeus very small; surface wrinkled, shagreened; pale yellow, heavily mottled with brown spots which form streaks above the clypeus and leave a pale space above on the face of each lobe. Body dull greenish yellow in straight dorsal and in slightly oblique and dislocated subdorsal, lateral and suprastigmatal lines, the subventral line straight and running along the prominent subventral fold. Spaces between these lines filled in with dark brown at the extremities only; *i. e.*, in three bands on thorax and subventrally and in irregular spots on joint 13. Spiracles black rimmed. Cervical shield large, with two brown bands on each half. The posterior part of joints 12 and 13, which is dark spotted, becomes transversely folded and assumes, imperfectly, the appearance of a round area, a little flattened, about the size of the hole in the case. The case is made of two leaves or of a single leaf bent over and cut off, the holes at the end made circular by thread. At the end of the stage the larva spins up one end of the case and hibernates. Pupation in the spring. A single brood in the year.

Food-plants, all the oaks, *Q. alba*, *Q. minor*, *Q. coccinea*, *Q. tinctoria*, *Q. nana*.

EXPLANATION OF PLATE VI.

- Fig. 1. Egg shell, side view, enlarged.
- Fig. 2. The same, end view.
- Fig. 3. Larval net, stage I, enlarged.
- Fig. 4. Larval net, stage III.
- Fig. 5. Case of mature larva.
- Fig. 6. Larva, dorsal view.
- Fig. 7. Head of larva, enlarged.
- Fig. 8. Moth of *Lacosoma chiridota*.
- Fig. 9. Larval case of *Cicinnus despecta* Walk.